

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application Of:

Jorma A. Virtanen

Serial Number: 09/139,213

Filing Date: August 24, 1998

Entitled: CASSETTE AND APPLICATOR FOR  
BIOLOGICAL CHEMICAL SAMPLE COLLECTION



Group Art Unit: 3736

Examiner: M. Hindenburg

PRELIMINARY AMENDMENT

Office of Petitions  
Commissioner of Patents and Trademarks  
Crystal Plaza, Bldg. 4, Room 3C23  
Washington, D.C. 20231

Sir:

Please amend the above-captioned continued prosecution application as set forth below.

In the Claims:

Please amend the claims and add the new claims as follows:

15. (Amended) An apparatus for collecting a biological sample from a subject for subsequent transfer to [a CD or DVD] an analyzer disk, said apparatus comprising:

(a) a cassette [comprising] having walls which define a cavity for receiving said biological sample, said cassette being adapted to engage said [CD or DVD] analyzer disk;

(b) an inlet for transferring said biological sample from the subject into said cavity;  
and

(c) an outlet for transferring said biological sample from said cavity to said [CD or DVD] analyzer disk when said cassette is engaged with said [CD or DVD] analyzer disk.

09819036-022001

RECEIVED  
FEB 23 2001  
TECHNOLOGY CENTER 3700

16. (Amended) An apparatus according to claim 15 wherein said cassette [comprises] has a mechanical rectifier which locks said cassette in engagement with said [CD or DVD] analyzer disk.

17. (Amended) An apparatus according to claim 15 wherein said inlet [comprises] has a conduit having a first end for penetrating said subject and a second end for penetrating the wall of said cassette which defines said cavity.

18. (Amended) An apparatus according to claim 15 [which further comprises] having a reagent or washing solution for said sample.

19. (Amended) An apparatus according to claim 15 [which further comprises] having an electrical component or microelectromechanical component.

20. (Amended) An apparatus according to claim 15 [which further comprises] having an applicator for housing said cassette prior to engagement of said cassette with said [CD or DVD] analyzer disk.

22. (Amended) [A CD or DVD] An analyzer disk comprising:

(A) a disk body having a surface adapted to engage an apparatus which contains a biological sample for transfer to said [CD or DVD] analyzer disk; and

(B) an apparatus engaged with said surface of said disk body, said apparatus [comprising] including:

(a) a cassette [comprising] having walls which define a cavity for containing said biological sample;

(b) an inlet for introducing said biological sample into said cavity prior to engagement of said apparatus with said surface of said disk body; and

(c) an outlet for transferring said biological sample from said cavity to said [CD or DVD] analyzer disk when said apparatus is engaged with said surface of said disk body.

23. (Amended) [A CD or DVD] An analyzer disk according to claim 22 wherein said cassette [comprises] has a mechanical rectifier which locks said cassette in engagement with said surface of said disk body.

24. (Amended) [A CD or DVD] An analyzer disk according to claim 22 wherein said inlet [comprises] has a conduit having a first end for receiving said biological sample and a second end for penetrating the wall of said cassette which defines said cavity.

25. (Amended) [A CD or DVD] An analyzer disk according to claim 22 wherein said apparatus [further comprises] has a reagent or washing solution for said sample.

26. (Amended) [A CD or DVD] An analyzer disk according to claim 22 wherein said apparatus [further comprises] has an electrical component or microelectromechanical component.

27. (Amended) A method for transferring a biological sample from a subject to [a CD or DVD] an analyzer disk, said method comprising [the steps of]:

transferring the biological sample from the subject to a cavity of a cassette;

engaging a cassette with [a CD or DVD] an analyzer disk; and

transferring the biological sample from said cassette to said [CD or DVD] analyzer disk.

28. (Amended) A method according to claim 27 wherein said cassette [further comprises] has a reagent or washing solution, said method further includes [comprising the step of] contacting said reagent or washing solution with said biological sample located [with] within said cavity of said cassette.

29. (Amended) A method according to claim 27 which further includes [comprises the step of] locking said cassette in engagement with said [CD or DVD] analyzer disk.

30. (Amended) A method according to claim 27 wherein said cassette further [comprises] has a conduit having a first end and a second end, wherein said method further includes [comprises the steps of] penetrating said subject with said first end and penetrating a

wall of said cavity of said cassette with said second end to provide transfer of said biological sample from said subject to said cavity.

31. (Amended) A method according to claim 27 wherein said cassette further [comprises] has an electrical component or microelectromechanical component, said method further includes [comprising the step of] treating said biological sample located in said cavity of said cassette with said electrical component or said microelectrochemical component.

32. (Newly Added) An apparatus according to any one of claims 15 through 20 wherein said analyzer disk is an optical disc.

33. (Newly Added) An apparatus according to claim 32 wherein said optical disc is a CD or a DVD.

34. (Newly Added) An apparatus according to any one of claims 15 through 20 wherein said analyzer disk is a CD or a DVD.

35. (Newly Added) An analyzer disk according to any one of claims 22 through 26 wherein said analyzer disk is an optical disc.

36. (Newly Added) An analyzer disk according to claim 35 wherein said optical disc is a CD or a DVD.

37. (Newly Added) An analyzer disk according to any one of claims 22 through 26 wherein said analyzer disk is a CD or a DVD.

38. (Newly Added) A method according to any one of claims 27 through 31 wherein said analyzer disk is an optical disc.

39. (Newly Added) A method according to claim 38 wherein said optical disc is a CD or a DVD.

40. (Newly Added) A method according to any one of claims 27 through 31 wherein said analyzer disk is a CD or a DVD.

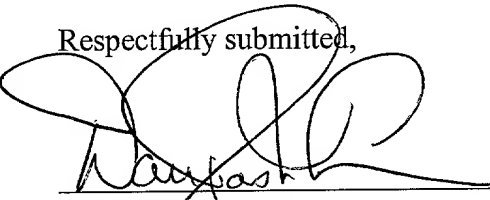
**REMARKS**

The independent claims have been broadened to substitute "analyzer disk" for "CD or DVD." Additional "style" changes to some of the claims which neither broaden nor narrow the claims have also been made.

All of the claims are reproduced below on Addendum Pages as per the new regulations set forth by the United States Patent and Trademark Office.

Entry of this Preliminary Amendment and allowance of this CPA at an early date are in order and respectfully requested.

Respectfully submitted,

  
\_\_\_\_\_  
Douglas N. Larson  
Registration No. 29,401

Dated: February 16, 2001

**OPPENHEIMER WOLFF & DONNELLY LLP**  
2029 Century Park East, Suite 3800  
Los Angeles, California 90067-3024  
(310) 788-5000 Telephone  
(310) 788-5100 Facsimile

**ADDENDUM PAGES**

15. (Amended) An apparatus for collecting a biological sample from a subject for subsequent transfer to an analyzer disk, said apparatus comprising:

(a) a cassette having walls which define a cavity for receiving said biological sample, said cassette being adapted to engage said analyzer disk;

(b) an inlet for transferring said biological sample from the subject into said cavity; and

(c) an outlet for transferring said biological sample from said cavity to said analyzer disk when said cassette is engaged with said analyzer disk.

16. (Amended) An apparatus according to claim 15 wherein said cassette has a mechanical rectifier which locks said cassette in engagement with said analyzer disk.

17. (Amended) An apparatus according to claim 15 wherein said inlet has a conduit having a first end for penetrating said subject and a second end for penetrating the wall of said cassette which defines said cavity.

18. (Amended) An apparatus according to claim 15 having a reagent or washing solution for said sample.

19. (Amended) An apparatus according to claim 15 having an electrical component or microelectromechanical component.

20. (Amended) An apparatus according to claim 15 having an applicator for housing said cassette prior to engagement of said cassette with said analyzer disk.

22. (Amended) An analyzer disk comprising:

(A) a disk body having a surface adapted to engage an apparatus which contains a biological sample for transfer to said analyzer disk; and

(B) an apparatus engaged with said surface of said disk body, said apparatus including:

23. (Amended) An analyzer disk according to claim 22 wherein said cassette has a mechanical rectifier which locks said cassette in engagement with said surface of said disk body.

25. (Amended) An analyzer disk according to claim 22 wherein said apparatus further comprises has a reagent or washing solution for said sample.

27. (Amended) A method for transferring a biological sample from a subject to an analyzer disk, said method comprising:

28. (Amended) A method according to claim 27 wherein said cassette has a reagent or washing solution, said method further including contacting said reagent or washing solution with said biological sample located within said cavity of said cassette.

- 7 -

30. (Amended) A method according to claim 27 wherein said cassette further has a conduit having a first end and a second end, wherein said method further includes penetrating said subject with said first end and penetrating a wall of said cavity of said cassette with said second end to provide transfer of said biological sample from said subject to said cavity.

31. (Amended) A method according to claim 27 wherein said cassette further has an electrical component or microelectromechanical component, said method further includes treating said biological sample located in said cavity of said cassette with said electrical component or said microelectrochemical component.

32. (Newly Added) An apparatus according to any one of claims 15 through 20 wherein said analyzer disk is an optical disc.

33. (Newly Added) An apparatus according to claim 32 wherein said optical disc is a CD or a DVD.

34. (Newly Added) An apparatus according to any one of claims 15 through 20 wherein said analyzer disk is a CD or a DVD.

35. (Newly Added) An analyzer disk according to any one of claims 22 through 26 wherein said analyzer disk is an optical disc.

36. (Newly Added) An analyzer disk according to claim 35 wherein said optical disc is a CD or a DVD.

37. (Newly Added) An analyzer disk according to any one of claims 22 through 26 wherein said analyzer disk is a CD or a DVD.

38. (Newly Added) A method according to any one of claims 27 through 31 wherein said analyzer disk is an optical disc.



39. (Newly Added) A method according to claim 38 wherein said optical disc is a CD or a DVD.

40. (Newly Added) A method according to any one of claims 27 through 31 wherein said analyzer disk is a CD or a DVD.

20020216 09:05:00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **RECEIVED**

APR 11 2001

In Re Application Of:

Virtanen, Jorma A.

Serial Number: 09/139,213

Filing Date: August 24, 1998

Entitled: **CASSETTE AND APPLICATOR FOR  
BIOLOGICAL CHEMICAL SAMPLE  
COLLECTION**

Group Art Unit: 3736

Examiner: Max Hindenburg

OFFICE OF PETITIONS

0-9/139,213

Office of Petitions  
Four Crystal Plaza - Suite 3C23  
2201 South Clark Place  
Arlington, Virginia 22202  
attn: Frances Hicks

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

**SUPPLEMENTAL PRELIMINARY AMENDMENT**

Sir:

This "Supplemental Preliminary Amendment" should be entered after the entry of the "Preliminary Amendment" filed on February 20, 2001.

IN THE CLAIMS:

Please **cancel** Claims 1-14.

Please **amend** Claim 22 as follows:

22. (Amended) An analyzer disk assembly comprising:

(A) an analyzer disk having a surface adapted to engage an apparatus which contains a biological sample for transfer to said analyzer disk; and

(B) an apparatus engaged with said surface of said analyzer disk, said apparatus including:

09/139,213-00001

- (a) a cassette having walls which define a cavity for containing said biological sample;
- (b) an inlet for introducing said biological sample into said cavity prior to engagement of said apparatus with said surface of said analyzer disk; and
- (c) an outlet for transferring said biological sample from said cavity to said analyzer disk when said apparatus is engaged with said surface of said disk.

**A clean version of the entire set of pending claims follows:**

15. An apparatus for collecting a biological sample from a subject for subsequent transfer to a CD or DVD, said apparatus comprising:
- a) a cassette comprising walls which define a cavity for receiving said biological sample, said cassette being adapted to engage said CD or DVD;
  - b) an inlet for transferring said biological sample from the subject into said cavity; and
  - c) an outlet for transferring said biological sample from said cavity to said CD or DVD when said cassette is engaged with said CD or DVD.
16. An apparatus according to claim 15 wherein said cassette comprises a mechanical rectifier which locks said cassette in engagement with said CD or DVD.
17. An apparatus according to claim 15 wherein said inlet comprises a conduit having a first end for penetrating said subject and a second end for penetrating the wall of said cassette which defines said cavity.
18. An apparatus according to claim 15 which further comprises a reagent or washing solution for said sample.

09/139,213-02004

20. An apparatus according to claim 15 which further comprises an applicator for housing said cassette prior to engagement of said cassette with said CD or DVD.

(A) an analyzer disk having a surface adapted to engage an apparatus which contains a biological sample for transfer to said analyzer disk; and

(a) a cassette having walls which define a cavity for containing said biological sample;

(c) an outlet for transferring said biological sample from said cavity to said analyzer disk when said apparatus is engaged with said surface of said disk.

24. A CD or DVD according to claim 22 wherein said inlet comprises a conduit having a first end for receiving said biological sample and a second end for penetrating the wall of said cassette which defines said cavity.

25. A CD or DVD according to claim 22 wherein said apparatus further comprises a reagent or washing solution for said sample.

26. A CD or DVD according to claim 22 wherein said apparatus further comprises an electrical component or microelectromechanical component.

27. A method for transferring a biological sample from a subject to a CD or DVD, said method comprising the steps of:

transferring the biological sample from the subject to a cavity of a cassette;

engaging said cassette with a CD or DVD; and

transferring the biological sample from said cassette to said CD or DVD.

28. A method according to claim 27 wherein said cassette further comprises a reagent or washing solution, said method comprising the step of contacting said reagent or washing solution with said biological sample located with said cavity of said cassette.

29. A method according to claim 27 which comprises the step of locking said cassette in engagement with said CD or DVD.

30. A method according to claim 27 wherein said cassette further comprises a conduit having a first end and a second end, wherein said method comprises the steps of penetrating said subject with said first end and penetrating a wall of said cavity of said cassette with said second end to provide transfer of said biological sample from said subject to said cavity.

09/139,213-00001

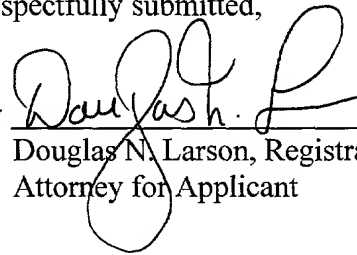
31. A method according to claim 27 wherein said cassette further comprises an electrical component or microelectromechanical component, said method comprising the step of treating said biological sample located in said cavity of said cassette with said electrical component or said microelectrochemical component.

Please charge any fees or credit any overpayments to our Miscellaneous Fees Account No. 16-2230.

Respectfully submitted,

Dated: April 6, 2001

By

  
\_\_\_\_\_  
Douglas N. Larson, Registration No. 29,401  
Attorney for Applicant

**OPPENHEIMER WOLFF & DONNELLY LLP**  
2029 Century Park East, 38th Floor  
Los Angeles, CA 90067-3024  
Telephone: (310) 788-5000  
Facsimile: (310) 788-5100

700220 9806T860

**MARKED-UP VERSION OF THE**  
**AMENDED CLAIM (37 CFR 1.121(c)(2))**

22. (Amended) An analyzer disk assembly comprising:

(A) [a] an analyzer disk [body] having a surface adapted to engage an apparatus which contains a biological sample for transfer to said analyzer disk; and

(B) an apparatus engaged with said surface of said analyzer disk [body], said apparatus including:

(a) a cassette having walls which define a cavity for containing said biological sample;

(b) an inlet for introducing said biological sample into said cavity prior to engagement of said apparatus with said surface of said analyzer disk [body]; and

(c) an outlet for transferring said biological sample from said cavity to said analyzer disk when said apparatus is engaged with said surface of said disk [body].

09139213.02201  
"20220" 9E05T860